IGTED VOLUNTEER DETAILS

Volunteer requirements

1. By signing up to volunteer, you agree to get trained before the event. When you register to be a volunteer (via the link in the email), you will be asked to pick a time out of the four available. If none of the times work for you, please contact smithigted@gmail.com imediately to arrange for a separate training sessions. Training is a vital part of IGTED and paramount to ensuring the safety of the young girls. If you do not get trained, you cannot participate in IGTED.

2. Arrive at least 5 minutes before your volunteer shift begins to sign in, put on a volunteer T-shirt, and report to your station.

3. You must return the T-shirt you are given. The OSE will not provide funding for new T-shirts until 2018.

4. Share your passion and excitement for engineering or STEM with the participants!

This year’s activities

Electrical Engineering - LEGO Mindstorm: Students will first learn the basics of programming a LEGO Mindstorm robot. They will then be given a task to LEGO Mindstorm robot to perform a perform a basic function.

Mechanical Engineering - Hydraulic Arm Design Challenge: The students will use this kit to design an hydraulic arm and learn about the engineering design process. A set of design challenges have to be developed (ie: Design and build an arm to move the most weight the furthest distance, Design and build a better end effector, etc).

Civil Engineering - House Design Challenge: Students will receive a short crash course in 2D AutoCAD. They will then pick a predetermined design challenge based on a real life scenario -examples: a recent earthquake, arctic condition, climate change. The students will then work in groups to design the house in AutoCAD, print it out on the laser-cutter, and then construct it.

Description of volunteer time slots

Morning Sessions

7:30am-8:15am: Set up
Entails - General preparation for the event: hanging signs/posters around Ford, setting up each classroom for its activity, and preparing whatever bits the activity requires. *Volunteers will get coffee and doughnuts

8:15am-9:00am: Registration
Entails - Girls start to arrive: checking the girls in, answering questions from parents/girls about the day, checking that each classroom is ready for activities, and other last minute errands.
9:00am-12:00pm - Activities
*Entails* - First session starts: floating around assigned activities answering questions and talking to the girls, solve problems that arise, helping the activity leaders, and making sure the activity goes as smoothly as possible.

11:45am-12:00pm: Prepare for pick-up/Activities/Wrap-up
*Entails* - First session winds down: start picking up things that are no longer in use, tidying the room around the girls, and helping to make cleanup easier.

12:00pm-12:30pm: Pick up
*Entails* - First session ends: helping the girls leave the classroom and cleaning up the room from the activity. Other volunteers will check parent IDs and help with participant pick up.

12:30-1:30: Lunch, clean-up, debrief, prepare reg
*Entails* - Mid event break: finish tidying up each classroom for the second session, discuss successes and weaknesses of the first session, eat lunch, and prepare for a second round of registration.

Afternoon Session

12:45-1:15: Set up
*Entails* - Second session preparation: setting up each classroom for its activity and preparing whatever pieces the activity requires.

1:15-2:00: Registration
*Entails* - Girls start to arrive: checking the girls in, answering questions from parents/girls about the day, checking that each classroom is ready for activities, and other last minute errands.

2:00-5:00: Activities
*Entails* - Second session starts: floating around assigned activities answering questions and talking to the girls, solve problems that arise, helping the activity leaders, and making sure the activity goes as smoothly as possible.

5:00-5:30: Pick up
*Entails* - Second session ends: helping the girls leave the classroom and cleaning up the room from the activity. Other volunteers will check parent IDs and help with participant pick up.

5:30-6:30: Clean Up
*Entails* - Final clean up: making sure all classrooms are spotless, putting away supplies and tools, removing posters, and basking in the glory of a successful event!